

# INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE



# IPCC Working Group II Scoping Meeting: Possible Special Report on "Extreme Events and Disasters: Managing the Risks"

Oslo, Norway • 23-26 March 2009

## Monday, 23 March 2009

### 08:00 Registration

### 09:00 Welcoming Remarks

- Erik Solheim, Minister of the Environment and International Development
- Margareta Wahlström, UN Assistant Secretary General for Disaster Risk Reduction
- Ellen Hambro, Director of the Norwegian Pollution Control Authority (SFT)
- **Renate Christ**, Secretary of the Intergovernmental Panel on Climate Change
- Øyvind Christophersen, Senior Advisor for Climate and Energy (SFT)

## 09:30 Background and Goals for the Meeting

 Vicente Barros, IPCC Working Group II Co-Chair and Chair of Extremes Scoping Meeting Science Steering Group

# 09:45 Framing the Science

- Disaster Risk Reduction Strategies: The United Nations Perspective
   Andrew Maskrey, UN International Strategy for Disaster Reduction
- Weather and Climate Extremes: How Can We Improve Our Understanding?
   David Easterling, NOAA / National Climatic Data Center

#### 10:30 Coffee Break

#### 11:00 Framing the Science (continued)

- Social, Institutional, and Human Context
   Karen O'Brien, University of Oslo,
   Global Environmental Change and Human Security Project
- Panel Discussion

#### 11:45 Session 1: Current Status of International Frameworks - Expectations for a Special Report

- UNFCCC Post-2012 Negotiations and the Nairobi Work Programme on Adaptation Youssef Nassef, UNFCCC Secretariat,
  - Adaptation, Technology, and Science Program
- Lessons Learned on Risk Management and Data Availability
   Maarten van Aalst. International Red Cross / Red Crescent Climate Centre
- Discussion

#### 12:30 Lunch

## 13:30 Session 2: Climate Change and Disaster Risk

- Trends in Extreme Events
  - **Neville Nicholls**, Monash University
- The Detection and Attribution of Extreme Events Changes
  - Francis Zwiers, Environment Canada
- Projection of Changes in Extremes by Very High Resolution Atmospheric Models
   Akio Kitoh, Meteorological Research Institute
- Discussion

# 14:45 **Session 3: Impacts of Weather and Climate-Related Extremes**

- Social and Economic Impacts
  - **Jose Marengo**, INPE / Centro de Ciencias do Sistema Terrestre
- Impacts on Agriculture, Food Security, and Ecosystems
   Jose Moreno, Universidad de Castilla La Mancha
- Impacts on Coastal Systems and Low-Lying Islands
   Roger McLean, University of New South Wales
- Discussion

## 16:00 Coffee Break

# 16: 20 Session 4: Risk Management – Adaptation and Disaster Preparedness

- Strategies for Reducing Risks Lessons Learned from Africa
   Coleen Vogel, University of Witwatersrand
- Insurance and Other Financing Responses
  - **Gordon McBean**, The University of Western Ontario, Institute for Catastrophic Loss Reduction
- Disaster Management and Emergency Preparedness
  - Franklin McDonald, University of the West Indies,
  - Institute for Sustainable Development
- Adaptation and Poverty Reduction: Governance, Tools, and Practice Tom Mitchell, University of Sussex, Institute of Development Studies
- Discussion

# 18:00 General Discussion and Plan for the Rest of the Meeting

- Vicente Barros, Chair of Extremes Scoping Meeting Science Steering Group
- **18:15 Adjourn**
- 18:30 **Reception**

### Tuesday, 24 March 2009

## 09:00 Introduction to Breakout Groups

- 1. Climate-related extreme events and future projections
- 2. Observed impacts of extreme events and future outlooks
- 3. Trends, distributions, and drivers of vulnerability to extreme events
- 4. Current practice in reducing vulnerability and disaster risk
- 5. Strategies for adaptation and for reducing the risks related to future extreme events
- 6. Towards a sustainable and resilient future

# 09:30 **Breakout Groups**

- 1. Climate-Related Extreme Events and Future Projections
  - Issues concerning extreme events, climate variability, and severity of events
  - Nature, frequency, intensity, and duration of present-day climate-related extreme events
  - Trends in extreme events including regional distribution and disaster hotspots
  - Statistical tools, data gaps, and proxy data
  - Attribution of the observed changes
  - Projections and uncertainties on future frequency and strength of extreme events, including new hazards, implications of climate variability, complex extremes, and regional differences
  - Progress for downscaling on local level and extreme events projections
- 2. Observed Impacts of Extreme Events and Future Outlooks
  - Links between extreme events, relevant hazard phenomena and disasters, and their impacts on ecosystems and the built environment
  - Complex phenomena, non-linearity, and the role of scales
  - Ecological, economic, and social impacts of climate-related disasters and wider implications for human security and assistance, development, and equity
  - Relevant climate-related events (e.g., heat waves, droughts, bushfires, floods, and hurricanes)
  - Projected trends in disaster occurrence and regional distribution
  - Projected trends in key vulnerabilities of human and biophysical systems
- 3. Trends, Distributions, and Drivers of Vulnerability to Extreme Events
  - The nature of the disaster process—social and institutional factors, in particular vulnerability arising from poverty, unplanned settlements, environmental degradation, etc.
  - Vulnerability of ecosystems, natural resources, and human societies
  - Future vulnerability related to development pathways
  - Societal dimensions of risk, including spatial planning and land-use change
  - Processes and patterns of risk accumulation
  - Coping capacities and capabilities, perception of risk, multiple stressors
  - Particular vulnerable groups, regions, sectors, and systems

- 4. Current Practice in Reducing Vulnerability and Disaster Risk
  - Policies, tools, and practices by governments and institutions (relevant sectors to include agriculture and food security, human health, water management, energy investments, settlements and infrastructure, costal zones, urban areas)
  - Autonomous adaptation practices, including lack of sufficient documentation of ongoing work and means to address this limitation
  - Community-level risk reduction and adaptation by region, and experience with technologies and coping practices, local and traditional knowledge
  - Case studies from particularly vulnerable ecosystems, sectors, and communities by region
  - Assessment of adequacy of current practice
  - Assessment of costs of implementation of current practices
- 5. Strategies for Adaptation and for Reducing the Risks Related to Future Extreme Events
  - Planning and development (increasing resilience and capacity to cope and adapt, mapping of risks, sectoral and cross-sectoral approaches)
  - Disaster management and emergency preparedness, monitoring and early warning, recovery and rehabilitation
  - Lessons learned from current risk management and adaptation practices
  - Integrating risk reduction and adaptation at institutional, national, regional, and local levels
  - Measures by institutions and humanitarian organizations
  - Costs, benefits, social and environmental consequences, global and aggregate impacts
  - Costs related to risk-reduction practices for adaptation
- 6. Towards a Sustainable and Resilient Future
  - Integration of disaster risk reduction and adaptation into planning and actions at national, regional, and local levels
  - Synergies between short-term coping and long-term planning
  - Integration of disaster risk, climate change mitigation, and development strategies
  - Impacts of future climate change and implications for regional, local, and sectoral development, access to resources, equity, and sustainable development
  - Implications of climate-related risks on achievement of Millennium Development Goals
- 10:30 Coffee Break
- 11:00 **Breakout Groups (cont.)**
- 12:30 **Lunch**
- 14:00 Plenary
- 15:00 **Coffee Break**
- 15:30 **Breakout Groups**
- 17:00 Adjourn

# Wednesday, 25 March 2009

# 09:00 Plenary

- Reports from breakout groups
- Challenges and opportunities for a Special Report (to include availability of relevant literature, a survey of comparable or related efforts, and identifying key participants)
- Structure and outline for the candidate Special Report
- 12:00 **Lunch**
- 13:00 New Breakout Groups to Address Structure and Outline
- 15:00 Coffee Break
- 15:30 Plenary: Reports from New Breakout Groups
- 16:15 Adjourn
- 16:30 Field Trip (optional)

# Thursday, 26 March 2009

# 09:00 **Breakout Groups**

- White paper
- Early publications
- Potential Special Report outline
- Potential Special Report authors
- Potential Special Report timeline / planning
- 11:30 **Concluding Plenary**
- 13:00 **Adjourn**
- 14:00 Meeting of Small Integration Team